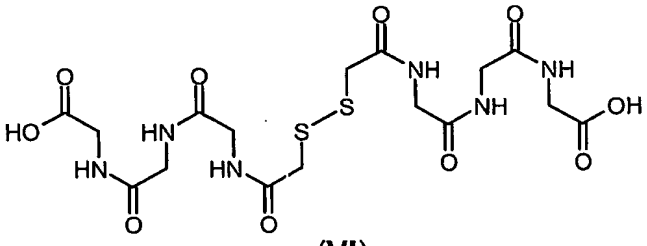
CLAIM

1. Method for preparing mercaptoacetyl triglycine labeled with a radionuclide, comprising the steps of adding a radionuclide to a solution that comprises a mercaptoacetyl triglycine dimer of formula VI



(VI)

a reducing agent and optionally a transfer ligand and heating the thus obtained solution.

2. Method as claimed in claim 1, wherein the solution that comprises the mercaptoacetyl triglycine dimer, the reducing agent and the optional transfer ligand is obtained by reconstitution from a lyophilisate.

3. Method as claimed in claim 1 or 2, wherein the radionuclide is technetium-99m.

4. Method as claimed in claim 3, wherein the technetium is added as ^{99m}Tc-pertechnetate.

5. Method as claimed in any one of the claims 1-4, wherein the reducing agent is selected from stannous salts, preferably stannous chloride.

6. Method as claimed in any one of the claims 1-5, wherein the transfer ligand is selected from sodium tartrate, glycine, citrate, malonate, gluconate, malate, lactate, pyrophosphate, glucoheptonate.

7. Method as claimed in any one of the claims 1-6, wherein the solution is heated to 80-120°C, preferably to 100°C.

8. Method as claimed in any one of the claims 1-7, wherein the solution is heated during 5-60 minutes, preferably during about 10 minutes.

9. Dimer of mercaptoacetyl triglycine according to formula VI for use in the method as claimed in any one of the claims 1-8.

10. Kit for the preparation of a radiolabeled mercaptoacetyl triglycine complex, comprising a dimer of mercaptoacetyl triglycine according to formula VI, a reducing agent and optionally a transfer ligand.

11. Kit as claimed in claim 10, wherein the reducing agent is a stannous salt, preferably stannous chloride.

12. Kit as claimed in claim 10 or 11, wherein transfer ligand is selected from sodium tartrate, glycine, citrate, malonate, gluconate, malate, lactate, pyrophosphate, glucoheptonate.

13. Kit as claimed in claim 11 or 12, comprising
0.01-0.10 mg, preferably 0.05 mg MAG3-dimer
0.05-0.25 mg, preferably 0.14 mg tin(II) chloride
10-20 mg, preferably 17.2 mg disodium tartrate.

14. Kit as claimed in any one of the claims 10-13, which is in lyophilised form.

15. Formulation of mercaptoacetyl triglycine labeled with a radionuclide and obtainable by a method as claimed in any one of the claims 1-8.